WE CLAIM:

1.   In a network for providing telecommunication service to a plurality of network subscribers, a method of estimating toll rates for a telecommunication service rate plan for at least one subscriber, the method comprising:

receiving call data for sample calls, the call data specifying at least one of

a specified telecommunication carrier,

a time of day,

a day of week,

an optional calling plan, and

a mileage band; and

processing the call data using interval analysis to calculate estimated rate data including estimated rate elements for the telecommunication carrier, time of day, day of week, calling plan and mileage band.

2.   The method of claim 1 wherein processing the call comprises:

generating an upper bound and a lower bound for the estimated rate data for a predetermined number of minutes of a call; and

using one of the upper bound and the lower bound as an estimate of a new rate element.

3.   The method of claim 2 further comprising:

using an amount billed for a one-minute call to generate an upper bound and a lower bound based on a first minute rate;

using an amount billed for a two-minute call to generate an upper bound and a lower bound for an additional minute rate; and

using an amount billed for a three-minute call to refine the upper bound and the lower bound for the additional minute rate.

4.   The method of claim 2 further comprising:

generating an upper bound for a first minute rate;

generating a lower bound for the first minute rate;

generating an upper bound for an additional minute rate;

generating a lower bound for the additional minute rate;

iteratively narrowing the respective bounds for the first minute rate and the
second minute rate.

5.   The method of claim 4 further comprising:

iterating until a percentage change between iterations of an interval
between the respective bounds for the first minute rate and the
second minute rate falls below a predetermined threshold.